## WARNING OF ORIGIN OF FIRE IS ON THE ENTERPRISES OF FOOD INDUSTRY

## Olga Slobodyan, Vira Zaets, Larissa Neshchadim

National University for Food Technologies, 68, Volodumyrska Str., 01601, Kyiv, Ukraine verazaiets@gmail.com

Fires are serious problem in many industrial projects. They increase economic, environmental and social costs from them as well as number of victims.

Each year over 6,000,000 fires occurs on Earth including approximately 60 000 - in Ukraine.

Increasing level of fire risk on industrial facilities is caused by significant growth of production power loading, increasing density of transport communications, increased temperature and pressure in process equipment, use of new polymeric materials with enhanced indicators of fire hazard. In modern industries with decreasing of fires likelihood drastic consequence from them, and damaged area increases.

Analysis of fires shows that achieving the maximum allowable value of hazards fire occurs in 5 - 10 minutes after beginning of fire, and the loss of carrying capacity of metal structures - after 10 -15 min. Thus the average start time for effective action of the fire units – is 20 -25 minutes.

The fire danger is strengthened by increasing concentration of in flammable substances and material values, per unit of buildings area.

The main causes of fires and inflammations are:

- Failure of production equipment 0.3%;
- Emblaze 1.6%;
- Kids fooling with fire -3.2%;
- Violation of rules for placement and operation of furnaces 7.3%;
- Violation of arrangement and operation of electric installation 19.7%;
- Careless handling fire 59.8%;
- Other reasons 8.1%.

The most important task of all fire safety systems is insuring protection of people from the hazards of fire which are caused by burning process, and rescue people in case of fire.

The essential task in operation of any object is to provide complete evacuation of all personnel in case of fire during one hour before the critical values of fire hazards shall appear.

KEY WORDS: fire, consequences, evacuation, safety.

## **ENSURING FIRE SAFETY**

## Sergiy Kovalenko

National University for Food Technologies, 68, Volodumyrska Str., 01601, Kyiv, Ukraine kovserdm@mail.ru

The proposed one approach to assess the amount of useful information in planning emergency response, based on the use of information and computational tasks of mathematical models.

Qualitative and operative work of the management in planning process during emergencies depends on the completeness and usefulness of the information to be used for the purposes of management. Obtaining the necessary information curing information provision must be addressed continuously in the interest of making informed decisions and developing plans, timely and adequate response of management to changes in environment.

Completeness and usefulness of information will be determined as the main task of this phase - definition of solution emergencies, which should fully comply with the conditions of the situation that has arisen, that is located depending on the completeness and usefulness of information collected and processed by the management during its definition. In some works of scholars by elimination emergencies the study of completeness and usefulness of the information is given enough attention. However, the proposed method does not fully take into account the wider introduction of new automation, which greatly affects the process of obtaining and processing information.

In the article the method of assessing the amount of useful information in planning emergency response is suggested based on the use of information and computational tasks of mathematical models.

There is a the necessity to determine the useful information for the government from total amount. On the other hand, the information may be useful for government, but by volume of it not will determine the optimal solution.

KEY WORDS: Fire, consequences, danger of fire, evacuation.